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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,744	03/06/2002	Takayuki Ono	3064YA/51007	5249

7590 05/03/2005  
CROWELL & MORING, L.L.P.  
P.O. Box 14300  
Washington, DC 20044-4300

EXAMINER
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GIESY, ADAM

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/090,744

Applicant(s)

ONO ET AL.

Examiner

Adam R. Giesy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 3/6/2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. Figure 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

2. Claims 3-4 are objected to because of the following informalities:

In claim 3, "tack" on line 3 should be --track--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasegawa (US Pat. No. 5,408,454).

Regarding claim 1, Hasegawa discloses a track jump control apparatus (Figure 3), comprising: a tracking actuator driver for driving a pick-up in a track traversing direction at a

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time of track-jumping (elements 52 and 53); a first pulse applying means for applying at a suitable timing a first acceleration pulse or a deceleration pulse to said tracking actuator driver (element 8); a determining means for determining whether or not a zero-cross cycle of an immediately preceding tracking error signal exceeds a predetermined threshold value until a target track number is reached (Figure 3, elements 31-33, Figures 4-6); and a second pulse applying means for applying a second acceleration pulse larger than said first acceleration pulse when it is determined by said determining means that said predetermined threshold value is exceeded (elements 33, 7, 9).

Regarding claim 2, Hasegawa discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above, and further that the said second acceleration pulse is set in such a manner that at least one of a level and a width thereof is larger than that of said first acceleration pulse (see Figures 2 and 6 – several embodiments of the kick pulse and brake pulse are depicted in both of these figures as having one pulse bigger than the other, and more specifically a brake pulse that is larger than a kick pulse).

Regarding claim 3, Hasegawa discloses a track jump method in a track jump control apparatus in which a target track number is set and a jump pulse corresponding to said target track number is applied to a tracking actuator driver (Figure 4, steps S1-S3), and a jump is performed one by one track by applying a first acceleration pulse or a deceleration pulse at a suitable timing to said tracking actuator driver until said target track number is reached, comprising following steps of: (a) determining whether or not the zero-cross cycle of an immediately preceding tracking error signal exceeds a predetermined threshold value until said target track number is

reached (S7); and (b) applying a second acceleration pulse larger than said first acceleration pulse when said zero-cross cycle exceeds said predetermined threshold value (S11).

Regarding claim 4, Hasegawa discloses all of the limitations of claim 3 as discussed in the claim 3 rejection above, and further that the said second acceleration pulse is set in such a manner that at least one of a level and a width thereof is larger than that of said first acceleration pulse (see Figures 2 and 6 – several embodiments of the kick pulse and brake pulse are depicted in both of these figures as having one pulse bigger than the other, and more specifically a brake pulse that is larger than a kick pulse).

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Nagano (US Pat. No. 4,819,219) discloses a track jump control system for an optical disk.
- b. Shigemori (US Pat. No. 4,817,069) discloses a tracking control system of an optical disk with a zero-cross comparator.
- c. Kishimoto et al. (US Pat. No. 6,628,580 B1) discloses an optical device with a track jumping capability and tracking error calculations.
- d. Kishimoto et al. (US Pat. No. 6,721,239 B2) discloses an optical device with accelerating/decelerating pulse generators.

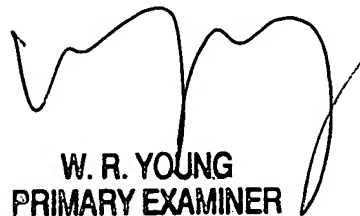
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARG 4/22/2005



W. R. YOUNG  
PRIMARY EXAMINER